Corporate Tax Avoidance and Customer Satisfaction

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Abstract

We examine the empirical association between customer satisfaction and tax avoidance. Customer satisfaction is a valuable intangible asset for most firms. On the other hand, tax avoidance is considered a socially undesirable corporate practice, which may harm firm reputation. Therefore, we argue that firms that focus on satisfying customers will avoid engaging in excessively risky tax policies. Using American Customer Satisfaction Index score (ACSI) as a measure of customer satisfaction, we find that customer satisfaction has a negative association with uncertain tax benefits (UTB). This finding is supported by a positive relation between customer satisfaction and cash effective tax rate, a negative relation between customer satisfaction and interests and penalties imposed by the Internal Revenue Service (IRS) upon tax audit. Taken together, we conclude that firms that are more concerned about customer satisfaction and reputation have a higher likelihood of avoiding tax aggressive activities.

Keywords:

Corporate social responsibility, tax avoidance, customer satisfaction, unrecognized tax benefits

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1. Introduction

"In December 2012, Starbucks announced that it would voluntarily pay more tax in the UK than it was legally obliged to after a series of negative media reports about its tax arrangements, as well as the threat of a customer boycott. Tax has become a reputational issue." PwC (2015, p. 4)

In this study, we investigate the relation between corporate tax policies and customer satisfaction. While Hoi et al. (2013) and Lanis and Richardson, (2012) consider how CSR activities impact tax avoidance behavior, we have little understanding of how customers, possibly the most important stakeholders, influence corporate tax policies. Customer satisfaction is a valuable intangible asset and manifests itself in a firm's reputation. Customer satisfaction is a measure of how products and services supplied by a company meet or surpass customer expectations. On the other hand, aggressive tax policies widely damage government tax revenue, tax dependent communities, public health services and social welfare (Slemrod &Yitzhaki 2002, Hoi et. al 2013,). In fact, for multi-national firms that engage in transfer pricing and other cross-border intra-group transactions and that negotiate with weak developing countries for tax holidays and incentives, there could be implications for human rights abuse.[1]

As a result, aggressive tax avoidance can adversely affect the firms' reputation, firm value, brand value, legitimacy in society and stakeholders' impression of firms. Therefore, we argue that firms that invest in customer satisfaction in order to enhance valuable intangible assets may stay away from

[1] A report by the International Bar Association's Human Rights Institute ((IBAHRI) Task Force on Illicit Financial Flows, Poverty and Human Rights (2013" entitled "Tax Abuses, Poverty and Human Rights" highlights tax abuses as human rights concern.

engaging in risky tax policies that may impair intangible asset value. Accordingly, aggressive tax avoidance practices or risky tax planning would be negatively associated with customer satisfaction.

Ittner and Larcker (1998) find evidence that customer satisfaction measures are leading indicators of financial performance, customer growth and purchase behaviors of customers. Shares of companies with high ACSI scores tend to do better than shares of companies with low scores. Ittner, Larker and Taylor (2009) report that customer satisfaction is value relevant and that if large increases in customer satisfaction are reported, the market reacts very quickly. Therefore, costs of losing customer satisfaction due to tax aggressiveness are high.

Research shows that maintaining customer loyalty and keeping current customers are generally more cost effective than attracting and bringing in new customers in many circumstances (Reinartz et al. 2005, Thomas 2001 & Min et al. 2016). High customer dissatisfaction can result in consumer boycott and loss of sales revenue. The advertising costs for repairing lost reputation and brand image are not negligible, especially when public relations costs are also taken into account. So the reputational costs of tax avoidance can be partially attributed to the customer base of a firm.

At a superficial glance, tax evasion, deferral and avoidance of any kind may appear to be a tax saving cost strategy but this logic is too simplistic. Aggressive tax avoidance may attract attention from tax authorities and result in penalties. If the firm's uncertain tax positions are rejected by the tax authorities, not only does the firm have to pay an audit settlement but it is can also be subject to interest on the late payment and penalties, especially if the tax claims are considered fraudulent actions.

We draw on several theories to justify our prediction. The corporate sustainability, corporate social responsibility (CSR) and organization theory academic literature is consistent with our prediction.

According to corporate citizenship theory, corporations enjoy the freedom, rights and safety to participate and take part in business and societal activities and in return are responsible to the society That is, corporations not only should respect the law, but they should also have concern for societal obligations and values (Lin et al. 2010). One of their responsibilities is paying their fair share of taxes. If firms avoid tax payment and act as free riders, society will sanction and disregard them. Customers are noticeable and interested citizens.

According to legitimacy theory, firms need and desire to legitimize and sustain relationships in the broader social and political environment in which they operate (Gray et al. 1995). If firm's goals do not align with those of the society, which is the case with tax aggressiveness, there will be a conflict or disparity between the firm and society (Deegan and Rankin, 1996). Therefore, firms that want to satisfy customers will also avoid aggressive tax policies.

According to stakeholder theory the firm ought not to be only accountable to the shareholders but to all stakeholders (Freeman 1984). In our opinion after government and shareholders, customers are the most important stakeholders in terms of corporate tax decisions, so their satisfaction and expectations have to be taken into account in firm tax behavior. In the marketing literature, reputation, brand value, brand image and brand loyalty are concepts that can be influenced in a negative or positive manner by tax avoidance and other (Rust & Zahorik 1993) decisions made by management (Austin & Wilson 2015, Gallemore et al. 2014, Bloemer & Kasper 1995).

Looking from a risk perspective, the relation between customer satisfaction and tax avoidance is double edged. It is not apparent whether the two will have a positive or negative association. On the one hand, we conjecture that firms can offset the excess risk of tax aggressiveness by investing in customer satisfying practices, suggesting a positive relation between customer satisfaction and UTB. On the other

hand, risk averse firms would try to reduce their tax-firm risk by being in tax compliance (Henlon and Slemrod 2009) and simultaneously try to reduce their customer-market risk by being customer friendly and having good customer relations (Tuli and Bharadwaj 2009).

We collected customer satisfaction data from the ACSI website. Claes Fornell first developed ACSI as an economic indicator to measure satisfaction of company customers. ACSI has used proprietary methodology in order to calculate customer satisfaction for 10 economic sectors, 43 key industries and hundreds of firms that represent a share of the American economy. ACSI customer satisfaction data is used in academic research in accounting, marketing and economics journals.

In our analysis, we use unrecognized tax benefits (UTB) and interests and penalties (I&P) as our proxies for aggressive tax avoidance and cash effective tax rates as a proxy for general tax avoidance. We mainly use UTB and I&P due to their distinctive features in capturing non-conforming tax avoidance. UTB is a good measure of the firm's current tax policies and is visible to the stakeholders because of the FIN 48 disclosure requirement. The I&P are consequences of unfair tax planning.

We find that customer satisfaction has a negative association with uncertain tax benefits (UTB). A positive relation with cash effective tax rate and a negative relation with interests and penalties imposed by the Internal Revenue Service (IRS) upon tax audit supports this finding. We conclude that firms that are more concerned about customer satisfaction and reputation have a higher likelihood of avoiding tax aggressive activities.

This study fits well in the growing and emerging literature in sustainability and tax avoidance and adds value to the ongoing research. The work builds and extends Hoi, Wu and Zhang (2013). We contribute to their study by introducing a decisive stakeholder and finding a significant result by accurately choosing effective tax avoidance proxies.

Hanlon and Heitzman (2010) also make the point that the focus for researchers and tax politicians should be to target deliberate and intentional actions at the aggressive end of the continuum. In this context, our results on uncertain tax positions and excessive tax actions are relevant to tax academicians and government tax officials. Our work is distinguished from previous work in that we find a significant non-financial, marketing indicator that is associated with corporate tax avoidance. Using the ACSI measure can shed light on the details of the CSR-TAX relation and brings in prominent and determined stakeholders (customers and consumers) in this context.

2. Literature review and hypotheses

The neo classical theory views corporations as profit-maximizing and transactional economics views them as cost-minimizing entities. There are limitations to these views that do not take into account consequences of certain behaviors. Research on the corporate culture must consider different aspects of corporate social responsibility and the value creation and value sustainability it offers (Foss & Klein 2010, Hodgson 2010). One of the main roles that firms play is the role of a corporate citizen and a committed institutional taxpayer. Tax payments of a firm have direct and indirect effects on different stakeholders. They directly affect government budgets and funds available to policy makers and social planners and indirectly affect other involved stakeholders such as employees or their representatives and even non-profit organizations and charities. An important group affected is customers, which is our focus in this research paper.

In recent years, the public has become more sensitive and involved regarding the socio-economic impact of firms. One significant aspect of this is the tax payments of firms to governments. Public reaction to tax evasions and even tax avoidance has intensified recently. We have come to a point where we see whistle blowers and independent reporters uncovering big tax scandals by both institutions and

individuals. We now see celebrities, politicians and well-known businesses losing reputation, respect, getting penalized and even serving prison time because of their tax avoidance and evasion actions. The recent Panama files scandal and the Spanish Royalty Court are just two famous examples.

Although there is an abundant literature relating sustainability and corporate social responsibility to firm tax behavior in general, little has been done to study the effects of different stakeholders on aggressive and risky tax policies. We build our study on a number of theories including sustainability theory, legitimacy theory, tax incidence theory, citizenship theory and utility theory.

Tax avoidance and CSR

Corporate social responsibility could potentially influence tax aggressiveness in terms of how a corporation develops systems and processes with regard to the well-being of society as a whole (Desai and Dharmapala, 2006b, Williams, 2007, and Avi-Yonah, 2008). Governments may not force corporations to engage in CSR activities but they should encourage companies to do so (Avi-Yonah et al. 2008). Socially irresponsible activities are widely damaging to customer base, reputation, brand image and shareholder value (Hoi et al. 2013). Firms that engage in excessively irresponsible corporate social activities are more aggressive in avoiding taxes – they have a higher likelihood of engaging in tax-sheltering activities and adopting more uncertain tax positions (Hoi et al. 2013). Lanis and Richardson (2012, p. 86) conclude “the social investment commitment and corporate social responsibility strategy (including the ethics and business conduct) of a corporation are important elements of corporate social responsibility activities that have a negative impact on tax aggressiveness.”

Risk and customer satisfaction

A look into the finance-marketing literature reveals that customer satisfaction reduces firm risk. Tuli and Bharadwaj (2009) find empirical support for their hypothesis that positive changes (i.e.,

improvement) in customer satisfaction result in negative changes (i.e., reduction) in overall systematic and idiosyncratic risk. Fornell et al. (2006) show that investments based on customer satisfaction produce sizable excess returns. They find a positive and significant relation between market value and customer satisfaction and that satisfied customers are economic assets with high returns. Corporate social responsibility can be used to model and build customer loyalty. Management can view corporate social responsibility as a long-term investment in the customer base (Albuquerque et al. 2012). However, the customer loyalty and customer satisfaction relation is not linear (Bowen et al. 2001).

Customers and corporate tax

Hanlon and Slemrod (2009) study market reaction to media news and announcements about a company's engagement in tax sheltering and aggressive taxing strategies in the retail and advertising industries, which are hugely retail customer based. They conclude that since these industries are mainly customer based rather than project or investment based, a portion of the market reaction and investor's negative attitude towards tax sheltering firms is due to customer dissatisfaction and even consumer boycott. Their study of tax avoidance and firm value indicates consumer reaction to corporate tax avoidance in the retail business. Excessively aggressive tax avoidance can result in consumer boycott. If the society labels a firm as a bad corporate citizen or a poor taxpayer in the public and social media this could badly damage their image, corporate social responsibility reputation and loose public trust. (Henlon and Slemrod 2009).

Desa i and Dharmapal (2009) focus on the costs associated with aggressive tax policy by firms, managers taking more risk and tax cover-up costs, but they do not mention reputation costs or customer loss costs of any kind. Tax avoidance activity does not result in simply transferring value from the state to the shareholder's pocket. Thus, it may be costly to the firm (Desai and Dharmapala 2009).

Corporate citizenship

There is no direct polling system on society opinion about corporate culture and corporate societal impact except for a number of social media campaigns and multimedia news. Customer satisfaction can serve as a proxy for society members' beliefs and attitude towards a corporation. Therefore, we introduce the corporate citizen concept into our paper to explain why customers care about corporate activities and why corporations care about customer satisfaction. Corporations can be citizens (Moon, Andrew Crane, Matten 2005). We use Corporate Citizenship as a recognition that a business, corporation or business-like organization, has social, cultural and environmental responsibilities to the community in which it seeks a license to operate, as well as economic and financial ones to its shareholders or immediate stakeholders to define the term.

Tax payment is among the fundamental roles in which corporate citizens engage with the society (Christensen and Murphy, 2004). Lanis and Richardson (2012) propose that society should consider tax aggressive companies irresponsible and illegitimate members. Citizens in a society have bilateral opinions and care about one another's impact on society. Corporations are similar to individual citizens in their rights and responsibilities. Just as an individual citizen does not have a legal requirement to aid her fellow citizens, the corporation may not have a requirement to engage in CSR. This point was clearly elaborated and emphasized in the paper "Corporate social responsibility and strategic tax behavior" (Avi-Yonah et al. 2008). Just like an individual citizen, a corporation is legally required to pay taxes, and is expected not to engage in over-aggressive tax planning to minimize its tax obligations. (Avi-Yonah et al. 2008). If firms fail to pay tax revenue, this can result in hostility, reputational damage among its stakeholders at best and even loss of business operations (Landolf, 2006; Erle, 2008; Hartnett, 2008)

Legitimacy theory

The next stream of research we study is legitimacy theory, which gives better insight into understanding the importance of consumer satisfaction when companies make decisions that affect taxpayers. Legitimacy theory explains why firms care about sustainability and their corporate social position and responsibility.

Corporations will not survive if they are not legitimate no matter how successful they are in terms of performance and profits, so they seek to legitimize and sustain relationships in the broader social and political environment in which they operate (Gray et al. 1995). Several researchers (e.g. Trotman, 1979; Trotman and Bradley, 1981; Guthrie and Parker, 1989; Deegan and Gordon, 1996; Wilmshurst and Frost, 2000; and Deegan et al., 2002) have found that corporate policies and actions that raise public concern, because they fall below community expectations, can contribute to the de-legitimization of a corporation.

In order to define legitimacy, we use the definition of organizational legitimacy from Lindblom (1994, p.2) "a status, which exists when an entity's value system is congruent with the value system of the larger social system of which an entity is a part". If the firm's values and goals do not align with those of the society, there will be a potential or actual conflict or disparity (Deegan and Rankin, 1996).

Who pays corporate income taxes? Understanding the distribution of corporate tax share among stakeholders is vital in understanding why employees, customers and citizens hold a stake in a corporation's tax position and why they are sensitive to corporate tax avoidance. Previously, economists believed that it is the firms themselves that paid taxes (Harberger 1962), but further research shows that this is inaccurate. Workers, customers and shareholders end up paying corporate taxes. Tax burden theory allocates shares of tax payment among consumers through higher prices of products, workers through a lower wage rate, and the firm through lower market share and lower rates of return (Fullerton, Metcalf, 2002).

There is a gap in the research literature between the fields of accounting and marketing or more precisely between tax and consumer behavior. This paper contributes to the literature by studying the effects of customer satisfaction on corporate tax behavior. Building on the above literature review we conjecture that socially responsible corporations engage more in customer satisfying decisions and honest and fair tax policies.

H1: There is a negative relation between customer satisfaction and uncertain tax benefits (UTBs).

Risk management theory

The relationship between customer satisfaction and tax avoidance can be opposite to our prediction. Some argue that firms use CSR activities to manage corporate risks including tax avoidance risks (Financial Times, 2004). Hoi et al. (2013) argued that firms could use CSR activities to minimize that damage arising from the tax avoidance strategy. Minor and Morgan (2011) study the role of corporate social responsibility in maintaining and building a firm's reputation in good conditions and repairing its brand image in case of scandals. They believe that socially responsible corporate activities are a risk management strategy practiced by a firm to impact reputation, which, in turn, protects the firm from the risk of adverse political, regulatory, and social sanctions/penalties in the case of negative corporate events. Kim et al. (2011) find strong evidence that tax avoidance is positively associated with the future crash risk of firm. They argue that firm managers attribute part of risk management to their risky tax positions.

Based on the risk management perspective we argue that firms will use customer satisfaction reputation to minimize the damage, if any, arising from tax avoidance strategy. Therefore, customer satisfaction may be a tool for firms to engage in tax avoidance.

H2: There is a positive relation between customer satisfaction and uncertain tax benefits (UTBs).

Why are customers a vital stakeholder? Customers are the most important group of people for any organization. They are the resource upon which the success of the business depends. When thinking about the importance of customers it is useful to remember that organizations are dependent upon their customers. Not developing customer loyalty and satisfaction could result in the loss of customer base and market share. Only by creating value for customers can companies create value for shareholders. .

Unless motivated by an exceptional event or experience, consumers rarely become proactive advocates for or against a given company's products and services. However, when mobilized an existing customer base can reshape a brand's images, define expectations of the brand for others, and drive or drain future business of a company. Changes in satisfaction can directly influence the rate at which customers not only refer business to or dissuade others away from a brand, but also the level to which consumers go silent due to indifference.

Why do customers/consumers care about corporate taxes? There are two theories that explain the reason why. First is the corporate citizenship theory, second is tax incidence theory. According to tax incidence when companies have to pay taxes they treat it as an extra burden, an excess cost so they add tax costs to the price of their product or service or reduce costs from other places such as labor costs and employee salary in order to avoid paying the tax themselves. If there were no price elasticity in the supply demand curve or wage elasticity in the job market, the corporate tax burden would have fallen on the shoulders of employees and customers. However, in reality, the increase in price will absorb a portion of consumer surplus and a portion of supplier surplus based on the elasticity and sensitivity of other stakeholders. Customers are aware of this. So actually, a share of the corporate tax actually has the same nature as sales tax to them. Customers are conscious and boundedly rational decision makers who are concerned about corporate decisions that they believe relate to them and interest them directly

or indirectly. Decisions such as brand, quality, price and our concept of interest, tax, affect them because they realize the company has received the customers' share of corporate tax and is avoiding payment and misusing customer trust.

On the theory of corporate citizenship, individual society members see corporations as entities that consume and benefit from what the society has to offer them, what governments provide to the well-being and welfare of citizens (Moon et al. 2005). Corporations receive loans; have access to land, utilities and infrastructure. The law defends their rights. They have political influence through voting and lobbying and the host government protects and secures them from outside environment. So they literally benefit from society member's rights and freedom. In return, they should also have citizen's duties and responsibilities. The act of tax avoidance or evasion in any way is considered a free riding act. The social contract in its goal to fairness and equality is meant to suppress and eliminate free riding. If the community labels you as a free rider, a tax avoider or in the radical term, a tax evader and an irresponsible citizen, it can damage a company's reputation and image.

3. Research Design:

Empirical Model

To examine the association between tax avoidance and customer satisfaction, we estimate the following model using ordinary least squares (OLS):

$$Y_{it} = \alpha_{it} + \beta satisfaction_{t-1} + controls + \varepsilon_{it}$$

The dependent variable Y represents three commonly used tax avoidance and aggressiveness measures: Log transform of unrecognized tax benefit (UTB), log transform of I&Ps, or CASH-ETR. The independent variable $satisfaction_{t-1}$represents the lagged (previous year) customer satisfaction score (ACSI). We

include a number of control variables used in previous literature. The control variables include institutional ownership (IO), operating cash flow (OCF), R&D, Tobin's Q, cash, change in low carry forwards (ΔNOL), sales, leverage, foreign income (FI), capital expenditures (CAPEX) and life cycle proxies. Operating cash flow represents profitability. We use IO as a proxy for corporate governance and Tobin's Q is a measure for firm value. We define control variables in the Appendix.

Measure of tax uncertainty

We will use the FIN-48 disclosure as a proxy for uncertain tax positions. In general, the purpose of FIN 48 is to standardize accounting for uncertain tax benefits and require companies to disclose their tax reserves (Blouin et al., 2007). Firms usually underpay tax authorities' required amount in the tax-filing procedure. The courts have the right to ask for the difference in the case of deductions, credits etc. In the post FIN-48 era, corporations are required to estimate and set aside the tax liability and tax expense and take into account the uncertainty of the tax benefit related to their financial and tax positions. We use this reserve to pay for additional tax due to regulatory audit and litigation resolution. We define UTB as log (1+ TXTUBEND) where TXTUBEND is the year-end amount of uncertain tax benefits denoted in millions.

Measure of I&P

The FIN-48 rules also requires firms to disclose their accumulated interest and penalties dollar amounts. When firms act fraudulently, the courts convict and penalize them and they have to pay an amount of penalty with interest on top of that. I&P is an indicator and consequence of excessive tax avoidance. The riskier the company's tax positions become the higher the probability of a penalty. We define I&P as log (1+ TXTUBXINTBS) where TXTUBXINTBS is the year-end amount of interests and penalties accrued (denoted in millions) due to uncertain tax benefits.

Measure of tax avoidance

The tax avoidance literature has developed different proxies for tax avoidance. To represent firms' general tax avoidance activities we use cash effective tax rates (CASH-ETR). We measure CASH_ETR as total cash taxes paid by a firm over the pre-tax income adjusted for special items. We should take into account that ETR is an inverse measure for tax avoidance

CASH-ETR 3-Year = Total cash taxes paid (TXPD) over a period of three years scaled by total pretax income (PI) less special items (SPI) over a period of three years.

$$\text{CASH-ETR 3-Year} = \frac{TXPD_t + TXPD_{t-1} + TXPD_{t-2}}{(PI_t + PI_{t-1} + PI_{t-2}) - (SPI_t + SPI_{t-1} + SPI_{t-}}$$

Measure of customer satisfaction

The American Customer Satisfaction Index (ACSI) is an economic indicator that measures the satisfaction of consumers across the U.S. economy. According to the ACSI website, "The American Customer Satisfaction Index provides unique customer experience benchmarking capabilities that come from the Index's one-of-a-kind, cross-industry structure." Again, according to the ACSI website ACSI uses proprietary methodology in order to calculate customer satisfaction for 10 economic sectors, 43 key industries and hundreds of firms that represent a share of the American economy. Within each industry group, several representative industries are included based on total sales. Finally, within each industry, we select the largest companies such that coverage included the majority of each selected industry's sales. For each firm, surveyors conducted approximately 250 interviews with the firm's current customers.

Accordingly, ACSI uses a multiple indicator approach to measure overall customer satisfaction as a latent variable. The result is a latent variable score or index that is general enough to be comparable across firms, industries, sectors, and nations.

Interests and Penalties (I&P)

A tax penalty and interest is levied on a corporation for not paying enough of its total estimated tax and withholding. In other words, if a corporation has an underpayment of estimated tax, they may be required to pay a penalty with interest. Taxpayers are required to make quarterly estimated tax payments before each tax year ends. However, accurate estimation requires accurate prediction of the future, so taxpayers sometimes underestimate the amount due. There is a penalty for under-estimating tax payment or having too little tax withheld, and interest is calculated and added to the amount to the owed amount that was not. The IRS Notice 433 is a document published by the Internal Revenue Service that outlines the interest rate applied to overpaid or underpaid taxes, as well as the interest rate applied to the underpayment of estimated taxes. The interest rate can vary from time to time, but typically ranges from 4-10%. Underpayment of corporate taxes can impose significant costs on firms, and the IRS will continue to charge interest until the firm pays the amount owed in full. Taxpayers are also subject to a late filing fee for missing the file reporting deadline, beside a fee for late payment

4. Sample Selection

We used three sources to collect our data. The tax avoidance data was extracted from Compustat. The customer satisfaction data was gathered from the American customer satisfaction index (ACSI) website. We extract the institutional ownership data from the ownership database of Thomson Reuters. The initial customer satisfaction data provided 3,011 firm year observations. However, we delete observations if they are from the utilities industry (SIC codes 4900-4949) and financial industry (SIC

codes 6000-6999). We delete observations for having missing values for the following variables: sales, dividend, tax variables values. For R&D, we replace missing values with zero. If we observe negative values for capital expenditures, tax expenses, UTB, AS, IPs or net income, we delete them. We bound CASH ETR between 0 and 1. Based on contemporary tax literature we also try to avoid outlier problems so we winsorize variables at the 1st and 99th percentiles. Our final sample consists of 1,082 firm year observations. Our sample covers the period between 1994 and 2014. However, the UTB and I&Ps start from 2007 due to FIN 48 disclosure requirement.

Descriptive Statistics

Descriptive statistics for independent and dependent variables are presented in Table 1. In the sample, the average 3-year CASH-ETR is about 27% and the standard deviation is around 11%. The mean UTB in our sample is 500 million, average interest and penalties lie at 100 million and for UTB settlements the number is 36 million, respectively. Comparison of UTB, I&P and settlement values points out that the results are skewed to the right. Since these figures are rightly skewed, we look at the mean value of the top quartile observations for each of these three variables.

[Insert Table 1 about here]

We also find that, in the sample, average leverage is 29%. The R&D and Capex are, on average, 0.9%, and 6% of total assets, respectively. We find our sample average Tobin's Q to be 2.21.

As can be seen, the number of observations for ETR is 1,082 while there are only 408 observations for UTB. This is because FIN-48 became effective in 2006 but our customer satisfaction and ETR data go back to 1994. Audit settlements are relatively small compared to UTB suggesting that companies absorb a high percentage of these benefits. The two low quartiles of R&D indicate that research and

development expenditures are only disclosed at high levels. For customer satisfaction, the average score of ACSI is 77 and the distribution shows low variance and range.

5. Empirical Results

Customer satisfaction and UTBs

As we discussed above, UTBs represent aggressive tax planning (Rego and Wilson, 2012). We hypothesize that customer satisfaction may have positive or negative impact on UTBs. Table 3 shows the results relating customer satisfaction to UTBs. We estimate two model specifications, one with current customer satisfaction and the other with lagged customer satisfaction. We use lagged customer satisfaction because it serves two purposes. First, it addresses an endogeneity concern that the customer satisfaction and tax policies may affect each other. Second, customer satisfaction may have lagged effect on tax strategies. For instance, high level of customer satisfaction of a firm in year t-1 may influence management's financial decision-making in year t.

In both column (1) and column (2) of Table 3, we find that the coefficients on lagged customers satisfaction and current customer satisfaction respectively are significantly negative at the 5 percent and 1 percent level respectively. The economic significance is also quite high. For instance, according to the coefficient of lagged customer satisfaction (column 1), for a 1 point increase in customer satisfaction, UTB decreases by 7.89 percent (exp. (0.076) =1.0789). This highly significant economic impact of customer satisfaction makes sense because Ittner and Larcker (1998) find that customer satisfaction measures are leading indications of accounting performance, customer growth and purchase behaviors

of customer. High levels of UTBs invoke audits by the IRS, which may lead to interests and penalties. In addition, if high UTB positions result from the abuse of tax rules, firms will get public attention through media and press reports. This, in turn, may upset customers, potentially leading to boycotting the products and services. Therefore, it is reasonable to argue that firms that care about satisfying customers will tend to avoid taking uncertain tax positions.

[Insert Table 2 about here]

Customer satisfaction and CASH-ETR

An alternative way of investigating if customer satisfaction reduces tax avoidance or aggressive tax planning is to examine how it influences CASH-ETR, a commonly used proxy for tax avoidance. In Table 3, we present the OLS regression results depicting the relationship between customer satisfaction and tax avoidance where a three-year average CASH-ETR is our proxy for tax avoidance. In columns (1) and (2), the independent variable is lagged customer satisfaction and current year customer satisfaction respectively. In column (1), we find that the coefficient of lagged customer satisfaction is significantly positive at the 5% level while in column (2) the coefficient of current customer satisfaction is insignificant. The positive coefficient in column (1) implies that higher customer satisfaction discourages firms to engage in tax avoidance. Economically, a 10 percent improvement in customer satisfaction will increase a firm's effective tax rate by 3.4 percent. The adjusted R^2 is about 50 percent suggesting about half of the variation in tax avoidance is explained by our model, everything else considered equal.

[Insert Table 3 about here]

Customer satisfaction and Interests & Penalties

In order to corroborate our above findings that customer satisfaction has negative associations with uncertain tax positions or tax avoidance, we test how customer satisfaction is related to interests and penalties imposed by the IRS upon conducting an audit after the tax filings. Interests and penalties result due to unfair, unethical or illegal tax planning. Hence, if customer satisfaction dissuades managers from taking risky or uncertain tax planning positions, then we will also observe a negative relation between customer satisfaction and interests and penalties.

Table 4 presents the results for this relation in two columns as before: in column (1), the independent variable is lagged customer satisfaction and in column (2) the variable is contemporaneous customer satisfaction. We find that both the coefficients of the lagged customer satisfaction and contemporaneous customer satisfaction are significant at the 5 percent and 1 percent level, respectively, implying that firms with higher customer satisfaction tend to pay lower interests and penalties. In terms of economic significance, both coefficients are almost the same. For instance, for one-point increase in customer satisfaction, the IPs decrease by 7.6 percent (exp. (0.0733) =1.076). This finding supports our previous results and adds accuracy to their robustness.

[Insert Table 4 about here]

6. Conclusions

In this study, we examine the association between intangible customer value and tax avoidance. More precisely, we examine the relations between a customer satisfaction index and UTB, I&P and 3-year Cash ETR. We find that firms that aggressively engage in tax avoidance activities are more likely to have lower customer satisfaction and generally care less about their customer/consumer relation. Firms that care about their reputation and customer relation engage less in tax avoidance. The proxy

for unrecognized tax positions is UTB based on FIN-48 requirements and the measure for customer satisfaction was ACSI.

The association between customer satisfaction and UTB/I&P was negative and its association with cash ETR was positive since ETR is an inverse measure for tax avoidance. Based on business literature from various fields, we also hypothesize that both customer dissatisfaction and tax avoidance are not just harmful to stakeholders but also to shareholders through decrease of firm and brand value, loss of sales and revenue, and increase in firm risk.

Our study is consistent with established theories in economics and strategy such as stakeholder theory, legitimacy theory, corporate citizenship, utility/risk aversion and sustainability theory. We contribute to the literature by arguing that customers are a vital and concerned stakeholder to the firm that can have significant impact on corporate tax policies and actions. This effect is documented by relations with two tax aggressiveness proxies, UTB and I&P. We conjecture that other stakeholders, such as the surrounding community and employees, can also have a significant impact on firm tax behavior. However, this was out of the paper's scope of work and is left for future research.

References

Albuquerque, P., P. Pavlidis, U. Chatow, K. Y. Chen, K.Y. and Z. Jamal. 2012. Evaluating promotional activities in an online two-sided market of user-generated content. Marketing Science 31 (3): 406-432.

Arnold C. H. 1962. The Incidence of the Corporation Income Tax. Journal of Political Economy 70 (3): 215-240.

Austin, C.R. and R. J. Wilson. 2015. Are Reputational Costs a Determinant of Tax Avoidance? In: 2013 American Taxation Association Midyear Meeting: Tax Avoidance in an International Setting.Bloemer, J.M. and H. D. Kasper. 1995. The complex relationship between consumer satisfaction and brand loyalty. *Journal of economic psychology* 16 (2): 311-329

Avi-Yonah, R.S., K. A. Clausing, and M. C. Durst. 2008. Allocating business profits for tax purposes: A proposal to adopt a formulary profit split. U of Michigan Law & Economics, Olin Working Paper, (09-003).

Blouin, J., C. Gleason, L. Mills and S. Sikes. 2007. What Can We Learn about Uncertain Tax Benefits from FIN 48? National Tax Journal 60 (3): 521-535.

Bowen, J.T. and S. L. Chen. 2001. The relationship between customer loyalty and customer satisfaction. International journal of contemporary hospitality management 13(5): 213-217.

"Building the Cross-Industry Index" Retrieved from http://www.theacsi.org/about-acsi/building-the-cross-industry-index

Christensen, J. and Murphy, R., 2004. The social irresponsibility of corporate tax avoidance: Taking CSR to the bottom line. Development, 47(3), pp.37-44.

Deegan, C. and Gordon, B., 1996. A study of the environmental disclosure practices of Australian corporations. Accounting and business research, 26(3), pp.187-199

Deegan, C. 2002. The legitimizing effect of social and environmental disclosures – a theoretical foundation. Accounting, Auditing & Accountability Journal 15 (3) 282 – 311

Desai, M. A. and D. Dharmapala. 2009. Corporate tax avoidance and firm value. The Review of Economics and Statistics 91 (3): 537-546.

Dyreng, S.D., M. Hanlon and E. L. Maydew. 2008. Long-run corporate tax avoidance. The Accounting Review 83 (1): 61-82.

Erle, B. 2008. Tax risk management and board responsibility. In: Schon, W. (Ed.), Tax and Corporate Governance: 205-220. Springer-Verlag, Berlin and Heidelberg.

Fornell, C., M. D. Johnson, E. W. Anderson, J. Cha, J. and B. E. Bryant. 1996. The American customer satisfaction index: nature, purpose, and findings. The Journal of Marketing 60 (October): 7-18.Fornell,

C., S. Mithas, III, F. V. Morgeson and M. S. Krishnan. 2006. Customer satisfaction and stock prices: High returns, low risk. Journal of marketing 70 (1): 3-14.

Foss, Nicolai J., and Peter G. Klein. "Critiques of transaction cost economics: an overview." Chapters (2010).

Freeman, R.E. 2010. Strategic management: A stakeholder approach. Pitman: Boston, ISBN 0-273-01913-9.

Gallemore, J., E. L. Maydew and J. R. Thornock. 2014. The reputational costs of tax avoidance. Contemporary Accounting Research 31 (4): 1103-1133.

Gray, R., R. Kouhy and S. Lavers. 1995. Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. Accounting, Auditing & Accountability Journal 8 (2): 47-77.

Guthrie, J. and Parker, L.D., 1989. Corporate social reporting: a rebuttal of legitimacy theory. Accounting and business research, 19(76), pp.343-352.

Hanlon, M. and S. Heitzman. 2010. A review of tax research. Journal of Accounting and Economics 50 (2): 127-178.

Hanlon, M. and J. Slemrod. 2009. What does tax aggressiveness signal? Evidence from stock price reactions to news about tax shelter involvement. Journal of Public Economics 93: 126-141.

Harberger, A.C. 1962. The incidence of the corporation income tax. The Journal of Political Economy: 215-240.

Hartnett, D. 2008. The link between taxation and corporate governance. In: Schon, W. (Ed.), Tax and corporate governance: 3-8. Springer Berlin Heidelberg.

Hoi, C. K., Q. Wu and H. Zhang. 2013. Is Corporate Social Responsibility (CSR) Associated with Tax Avoidance? Evidence from Irresponsible CSR Activities. The Accounting Review. 88 (6): 2025-2059.

Hodgson, Geoffrey M. "Limits of transaction cost analysis." The Elgar Companion to Transaction Cost Economics. Edward Elgar, Cheltenham UK and Northampton MA (2010): 297-306.

Hoopes, J.L., D. Mescall and J. A. Pittman. 2012. Do IRS audits deter corporate tax avoidance? The Accounting Review 87 (5):1603-1639.

Ittner, C.D. and D. F. Larcker. 1998. Are nonfinancial measures leading indicators of financial performance? An analysis of customer satisfaction. Journal of accounting research, 36: 1-35.

Ittner, C.D., D.F. Larcker and D. Taylor (2009). Commentary—The Stock market's Pricing of Customer Satisfaction. Marketing Science 28:5, 826-835

Jo, H. and H. Na. 2012. Does CSR Reduce Firm Risk? Evidence from Controversial Industry Sectors. Journal of Business Ethics 110 (4): 441-456.

Kim, J.-B., Y. Li, and L. Zhang. 2011. Corporate tax avoidance and stock price crash risk: Firm-level analysis. Journal of Financial Economics 100 (3): 639–662.

Landolf, U. 2006. Tax and corporate responsibility. International Tax Review 29 (July): 6-9.

Lanis, R. and G. Richardson. 2012. Corporate social responsibility and tax aggressiveness: An empirical analysis. Journal of Accounting Public Policy 31: 86–108.

Lin, C. P., Lyau, N. M., Tsai, Y. H., Chen, W. Y., & Chiu, C. K. (2010). Modeling corporate citizenship and its relationship with organizational citizenship behaviors. Journal of Business Ethics, 95(3), 357–372.

Lindblom, C. K. 1994. The implications of organizational legitimacy for corporate social performance and disclosure. Critical Perspectives on Accounting Conference, 120. New York, NY.

Lindorff, M., E. P. Jonson and L. McGuire 2012. Strategic Corporate Social Responsibility in Controversial Industry Sectors: The Social Value of Harm Minimisation. Journal of Business Ethicis 110: 457–467.

Matten, D. and A. Crane. 2005. Corporate citizenship: Toward an extended theoretical conceptualization. Academy of Management review 30 (1): 166-179.

Min, S., X. Zhang, N. Kim and R. K. Strivastava. 2015. Customer Acquisition and Retention Spending: An Analytical Model and Empirical Investigation in Wireless Telecommunications Markets. Journal of Marketing Research 53 (5): 728-744.

Minor, D. and J. Morgan. 2011. CSR as reputation insurance: Primum non nocere. California Management Review 53 (3): 40-59

Moon, J., A. Crane and D. Matten. 2005. Can corporations be citizens? Corporate citizenship as a metaphor for business participation in society. Business Ethics Quarterly 15 (03): 429-453.

Reinartz, W., J. S. Thomas and V. Kumar. 2005. Balancing acquisition and retention resources to maximize customer profitability. Journal of Marketing 69 (1): 63-79.

Roman, L. and G. Richardson. 2012. Corporate social responsibility and tax aggressiveness: a test of legitimacy theory. Accounting, Auditing & Accountability Journal 26 (1): 75 – 100.

Rust, R.T. and A. L. Zahorik. 1993. Customer satisfaction, customer retention, and market share. Journal of retailing 69 (2): 193-215.

Shackelford, D. A. and T. Shevlin. 2001. Empirical tax research in accounting. Journal of accounting and economics 31(1): 321-387.

"The science of customer satisfaction" Retrieved from http://www.theacsi.org/about-acsi/the-science-of-customer-satisfaction

Thomas, J. S. 2001. A methodology for linking customer acquisition to customer retention. Journal of Marketing Research 38 (2): 262-268.

Trotman, K.T., 1979. Social responsibility disclosures by Australian companies. The Chartered Accountant in Australia, 49(8), pp.24-28.

Trotman, K.T. and Bradley, G.W., 1981. Associations between social responsibility disclosure and characteristics of companies. Accounting, organizations and society, 6(4), pp.355-362.

Tuli, K. R., and S. G. Bharadwaj. 2009. Customer satisfaction and stock returns risk. Journal of marketing 73 (6): 184-197.

Wilmshurst, T.D. and Frost, G.R., 2000. Corporate environmental reporting: a test of legitimacy theory. Accounting, Auditing & Accountability Journal, 13(1), pp.10-26.

Xueming, L. and C. B. Bhattacharya. 2006. Corporate Social Responsibility, Customer Satisfaction, and Market Value. Journal of Marketing. 70 (4): 1-18.

Table A: Variable definitions

Variable	**Definition**	**Mnemonic**
CASH-ETR 3-YEAR	Average three-years of total cash tax payment divided by three-year average pretax income less special items	TXPD/(PI-SI)
UTB	Log transformed amount of unrecognized tax benefits at the end of the year.	LOG (1+TXTUBEND)
IPs	The interests and penalties (TXTUBXINTBS) accrued in the balance sheet. We take natural logarithm of TXTUBXINTBS plus one.	LOG(1+TXTUBXINTBS)
SALES	Log of dollar amount of Sales plus one	LOG (1+SALE)
LEVERAGE	Short-term debt plus long-term debt divided by total firm assets	(DLTT+DLC)/AT
OCF	Operating cash flow divided by total firm assets	(OANCF/AT)
RD	Research & development expense divided by total firm assets	XRD/AT
TOBIN'S Q	Total firm assets minus book value of equity plus market value of equity	(AT-CEQ+PRCC_F*CSHO)/AT
CAPEX	Capital firm expenditures divided by total firm assets	CAPX/AT
Life cycle proxies	Life cycle dummy variable is based on three-year average cash flows.	
INTRO	Dummy variable equals one if operating (OANCF) and investing cash flows (IVNCF) are negative and financings cash flow is positive (FINCF), and zero otherwise.	
GROWTH	Dummy variable equals one if operating (OANCF) and financing cash flows (FINCF) are positive and investing cash flow (IVNCF) is negative, or else zero.	
MATURITY	Dummy variable equals one if operating cash flow (OANCF) is positive, and investing (IVNCF) and financing cash flows (FINCF) are negative, and equal to zero otherwise.	
DECLINE	Dummy variable equals one if operating cash flow (OANCF) is negative, investing cash flow (IVNCF) is positive and financing cash flow (FINCF) is either positive or negative, or otherwise it is equal to zero.	
FI	The foreign income divided by lagged assets (AT). If foreign income values are missing values, we set them to zero.	PIFO/AT
IO	. We define institutional ownership as the number of shares owned by institutions divided by the total number of outstanding shares.	
ΔNOL	This term represents the change in tax loss carry forward (TLCF) between current year and prior year scaled by lagged total asset (AT)	$(TLCF_t-TLCF_{t-1})/AT_{t-1}$

Table 1: Summary Statistics

Variable	N	Std	Mean	P25	P50	P75
Cash ETR 3 year	1082	0.111754	0.2712323	0.2026451	0.2737076	0.3398731
UTB (millions)	408	939.7352	500.298	43.1685	126	431.172
Audit Settlement(millions)	408	105.8037	36.84321	0.117	4	21
Interest and penalties (millions)	367	186.8139	100.2677	8.1	27.1	86
Satisfaction	1082	6.334017	77.34196	74	78	82
Leverage	1078	0.1658584	0.2884815	0.1651426	0.2768757	0.3907149
Sales	1082	1.128008	9.365413	8.656587	9.50605	10.26733
R&D	1082	0.0198087	0.0088185	0	0	0.0100234
Capex	1077	0.04023	0.060387	0.0328901	0.0495072	0.0788495
Tobin's Q	1082	1.212682	2.216881	1.382248	1.828641	2.67013
Cash	1081	0.109753	0.0914678	0.0179104	0.0522373	0.1194711
I**O*** 1000	899	2.33992	2.067439	0.8901748	1.484941	2.433546
Δ NOL	664	0.0397224	0.0047773	0	0	0.0017724
FI	1082	0.0397747	0.0262594	0	0.005676	0.0390875

Table 2: Regression of unrecognized tax benefits (UTB) on customer satisfaction

VARIABLES	(1) UTB	(2) UTB
$SATISFACTION_{t-1}$	-0.0760**	
	(0.0384)	
SATISFACTION		-0.104***
		(0.0381)
CASH	-0.631	-0.958
	(1.337)	(1.268)
OCF	2.073	1.203
	(3.401)	(3.154)
LEV	1.240	1.376*
	(0.752)	(0.728)
SALES	1.136***	1.074***
	(0.235)	(0.195)
R&D	13.83	11.65
	(13.44)	(12.48)
CAPEX	-8.301*	-6.643
	(4.909)	(4.470)
TOBIN'S Q	-0.319**	-0.289**
	(0.135)	(0.138)
ΔNOL	-0.855	-1.375
	(1.355)	(1.519)
FI	21.38**	20.39**
	(9.849)	(8.219)
IO	0.0256	0.0172
	(0.127)	(0.0656)
CONSTANT	0.0188	2.736
	(4.268)	(3.785)
LIFE CYCLE PROXIES	Yes	Yes
FF 48 INDUSTRY FIXED EFFECTS	Yes	Yes
YEAR FIXED EFFECTS	Yes	Yes
N	206	217
R^2	0.776	0.784
ADJUSTED R^2	0.725	0.738

Table 3: Regression of cash effective tax rate on customer satisfaction

VARIABLES	(1) CASH-ETR	(2) CASH-ETR
$SATISFACTION_{t-1}$	0.00265**	
	(0.00123)	
SATISFACTION		0.00184
		(0.00137)
CASH	-0.0135	0.0133
	(0.0806)	(0.0831)
OCF	0.0526	0.0848
	(0.0951)	(0.0973)
LEV	0.000483	-0.0119
	(0.0374)	(0.0394)
SALES	-0.0166**	-0.0161*
	(0.00802)	(0.00814)
R&D	-0.346	-0.141
	(0.802)	(0.784)
CAPEX	0.630***	0.532**
	(0.198)	(0.205)
TOBIN'S Q	-0.00316	-0.00326
	(0.00453)	(0.00465)
ΔNOL	0.160	0.0749
	(0.133)	(0.0953)
FI	-0.111	-0.114
	(0.181)	(0.177)
IO	-0.00143	-0.000932
	(0.00159)	(0.00187)
CONSTANT	0.187	0.323**
	(0.140)	(0.149)
LIFE CYCLE PROXIES	Yes	Yes
FF 48 INDUSTRY FIXED EFFECTS	Yes	Yes
YEAR FIXED EFFECTS	Yes	Yes
N	510	564
R^2	0.554	0.535
ADJUSTED R^2	0.502	0.485

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Regression of interests and penalties (IPs) on customer satisfaction

VARIABLES	(1) IPs	(2) IPs
$SATISFACTION_{t-1}$	-0.0733**	
	(0.0299)	
SATISFACTION		-0.0747***
		(0.0277)
CASH	-0.406	-0.406
	(1.331)	(1.414)
OCF	5.799***	3.794**
	(1.578)	(1.496)
LEV	-0.0533	0.0968
	(0.457)	(0.506)
SALES	1.289***	1.289***
	(0.179)	(0.167)
R&D	19.34**	15.35
	(9.098)	(9.463)
CAPEX	-10.39***	-7.008**
	(2.983)	(2.928)
TOBIN'S Q	-0.296***	-0.249**
	(0.0881)	(0.0942)
ΔNOL	-1.628	-3.128**
	(0.987)	(1.465)
FI	-1.576	1.779
	(4.254)	(3.943)
IO	-0.115	0.0688
	(0.109)	(0.0526)
CONSTANT	-2.755	-2.701
	(3.520)	(3.157)
LIFE CYCLE PROXIES	Yes	Yes
FF 48 INDUSTRY FIXED EFFECTS	Yes	Yes
YEAR FIXED EFFECTS	Yes	Yes
N	185	195
R^2	0.856	0.842
ADJUSTED R^2	0.818	0.803